

FIGURE 1A

387	TAT TTC AGT AAT GTG ATC AGC AAG AGT GAC GTG AAG TCA TTG GCT GAA GCT GAT	432
	Y F S N V I S K S D V K S L A E A D	
441	GAA CAG GAA GTT GTG GCT GAG GTT CAG GAA TTT TAT GGT GAT TAC ATT GCT GTG	486
	E Q E V V A E V Q Q E F Y G D Y I A V	
495	AAC CCA CAT TTG TTT TCC CTC AAT ATT TTG GGT TGC TGC CAG GGT CGA AAT TGG	540
	N P H L F S L N I L G C C Q G R N W	
549	GAT CCA GCC CAG CTA TCT AGA ACA ACT CAA GGG CTT ACA GCT CTC CTT TTA TCT	594
	D P A Q L S R T T Q G L T A L L L S	
603	CTG AAG AAG TGT CCC ATG ATT CGT TAT CAG CTC TCA TCA GAG GCA GCA AAG AGA	648
	L K K C P M I R Y Q L S S E A A K R	
657	CTT GCA GAG TGC GTT AAG CAA GTG ATA ACT AAA GAA TAT GAA CTG TTT GAA TTC	702
	L A E C V K Q Q V I T K E Y E L F E F	
711	CGT CGG ACA GAG GTT CCT CCA TTG CTC CTT ATT TTA GAT CGC TGT GAT GAT GCC	756
	R R T E V P P P L L L I L D R C D D A	

FIGURE 1B

Figure 1C

765	774	783	792	801	810
ATC ACC CCA TTG CTA AAC CAG TGG ACA TAT CAG GCC ATG GTC CAC GAA CTA CTA					
I T P L L N Q W T Y Q A M V H E L L					
819	828	837	846	855	864
GGC ATA AAC AAC AAT CGG ATT GAT CTT TCC AGA GTG CCG GGA ATC AGT AAA GAC					
G I N N R I D L S R V P G I S K D					
873	882	891	900	909	918
TTA AGA GAA GTG GTC CTA TCT GCT GAA AAT GAT GAA TTC TAT GCT AAT AAT ATG					
L R E V V L S A E N D E F Y A N N M					
927	936	945	954	963	972
TAC CTG AAC TTT GCT GAG ATT GGT AGC AAT ATA AAG AAT CTC ATG GAA GAT TTT					
Y L N F A E I G S N I K N L M E D F					
981	990	999	1008	1017	1026
CAG AAG AAG AAA CCA AAA GAA CAG CAA AAA CTA GAA TCA ATA GCA GAC ATG AAG					
Q K K P K E Q Q K L E S I A D M K					
1035	1044	1053	1062	1071	1080
GCG TTT GTT GAG AAT TAT CCA CAG TTC AAG AAA ATG TCT GGG ACT GTT TCA AAG					
A F V E N Y P Q F K K M S G T V S K					
1089	1098	1107	1116	1125	1134
CAT GTG ACA GTG GTT GGA GAA CTG TCT CGA TTG GTC AGT GAA CGG AAT CTG CTG					
H V T V V G E L S R L V S E R N L L					

FIGURE 1C

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

1143 1152 1161 1170 1179 1188

GAG GTT TCA GAG GTT GAG CAA GAA CTG GCC TGT CAA AAT GAC CAT TCT AGT GCT
E V S E V E Q E L A C Q N D H S S A

1197 1206 1215 1224 1233 1242
CTC CAG AAT ATA AAA AGG CTT CTG CAG AAC CCC AAA GTG ACA GAG TTT GAT GCT
L Q N I K R L L Q N P K V T E F D A

1251 1260 1269 1278 1287 1296
GCC CGC CTG GTG ATG CTT TAT GCT TTA CAT TAT GAG CGA CAC AGC AGC AAT AGC
A R L V M L Y A L H Y E R H S S N S

1305 1314 1323 1332 1341 1350
CTG CCA GGA CTA ATG ATG GAC CTC AGG AAT AAA GGT GTT TCT GAG AAG TAT CGA
L P G L M M D L R N K G V S E K Y R

1359 1368 1377 1386 1395 1404
AAG CTC GTG TCT GCA GTT GTT GAA TAT GGT GGT AAA CGA GTC AGA GGA AGT GAC
K L V S A V V E Y G G K R V R G S D

1413 1422 1431 1440 1449 1458
CTC TTC AGC CCC AAA GAT GCT GTG GCT ATC ACC AAA CAA TTC CTC AAA GGA CTG
L F S P K D A V A I T K Q F L K G L

1467 1476 1485 1494 1503 1512
AAG GGA GTA GAA AAT GTA TAT ACA CAG CAT CAA CCT TTC CTA CAT GAA ACC CTG
K G V E N V Y T Q H Q P F L H E T L

FIGURE 1D

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

1521 1530 1539 1548 1557 1566
 GAT CAT CTC ATC AAA GGA AGG CTT AAG GAA AAC CTA TAT CCT TAT TTA GGC CCC
 D H L I K G R L K E N L Y P Y L G P

1575 1584 1593 1602 1611 1620
 AGC ACA CTC AGA GAC AGA CCT CAG GAT ATC ATT GTG TTT GTA ATT GGA GGA GCC
 S T L R D R P Q D I I V F V I G G A

1629 1638 1647 1656 1665 1674
 ACC TAT GAA GAG GCT CTA ACA GTT TAT AAC CTG AAC CGC ACC ACT CCT GGA GTG
 T Y E E A L T V Y N L N R T T P G V

1683 1692 1701 1710 1719 1728
 AGG ATT GTC CTG GGA GGC ACC ACA GTG CAC AAC ACG AAA AGT TTC CTA GAG GAA
 R I V L G G T T V H N T K S F L E E

1737 1746 1755 1764 1773 1782
 GTT CTG GCT TCT GGA CTG CAC AGC CGA AGC AAG GAG AGC TCT CAA GTC ACA TCA
 V L A S G L H S R S K E S S Q V T S

1791 1800 1809 1818 1827 1836
 AGG TCA GCG AGC AGA AGA TGA AAC GGT GGT TGG GGG AAG GGC ACA GCT TCC TCT
 R S A S R R

1845 1854 1863 1872 1881 1890
 CTT GTC CCC ACT ACA GGT TTT CCC TAC TAA ACA AAG GTG TTG GAG AGC AGC TTT

FIGURE 1E

Figure 1F

1899	1908	1917	1926	1935	1944
GGG TTC TGT GCT GGT TGT TAG AAC TCA TCT CCA GGT AGC CCA CGG ATA CGT GGT					
1953	1962	1971	1980	1989	1998
TGG CAC AGA CAC AAG ACT CCC AGA GTT GTC CTA ACA ATA AGT CTG AGC CCA TCT					
2007	2016	2025	2034	2043	2052
CAA CCC ACT TTT CTC CGG TAG TCT TTA TGT ATC TGT TAG CAC AAT CAC TTC AGT					
2061	2070	2079	2088	2097	2106
TAC TGA TGA ATT TTG TTG GGA TCT GAC TTG GGG AAA GGG TTA TCA GAG CCT AGA					
2115	2124	2133	2142	2151	2160
GGG GCT TAA AAA GTA ATC ATT TGA TGT ACA TAC CAC ACT CCT TGG CTT CCT TTC					
2169	2178	2187	2196	2205	2214
TCT TCC CTT AAC CCT TTC TGC TTT TCA TTA ACC ACA TTC CTG CAC AAC TCA TTT					
2223	2232	2241	2250	2259	2268
CTG AAA ACC TAC CAT GTT TCT TTA CAG AGC CAT CCA AAA ATT TTT TGT CCC TAC					

FIGURE 1F

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

2277 2286 2295 2304 2313 2322

ATA GCA ATT TTC TGT GGC ACT GAG AAA CCA TGT ATG ACC ACA ATA AAA ATC CAT

2331 2340
TTT GTG AAA GGA AAA AAA AAA 3'

FIGURE 1G

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

SECRET

1	MN	V	F	A	V	K	Q	Y	I	S	K	M	I	E	D	S	G	P	G	M	K	V	L	L	M	D	K	E	T	T	G	I	V	S	M	V	Y	T	75871		
1	MN	V	F	A	V	K	Q	Y	I	S	K	M	I	E	D	S	G	P	G	M	K	V	L	L	M	D	K	E	T	T	G	I	V	S	M	V	Y	T	GI 1703494		
41	Q	S	E	I	L	Q	K	E	V	Y	L	F	E	R	I	D	S	Q	N	R	E	I	M	K	H	L	K	A	I	C	F	L	R	P	T	K	E	N	V	D	75871
41	Q	S	E	I	L	Q	K	E	V	Y	L	F	E	R	I	D	S	Q	N	R	E	I	M	K	H	L	K	A	I	C	F	L	R	P	T	K	E	N	V	E	GI 1703494
81	Y	I	I	Q	E	L	R	R	P	K	Y	T	I	Y	F	I	Y	F	S	N	V	I	S	K	S	D	V	K	S	L	A	E	A	D	E	Q	E	V	V	A	75871
81	Y	L	I	Q	E	L	R	R	P	K	Y	S	I	Y	F	I	Y	F	S	N	V	I	S	K	S	D	V	K	S	L	A	E	A	D	E	Q	E	V	V	A	GI 1703494
121	E	V	Q	E	F	Y	G	D	Y	I	A	V	N	P	H	L	F	S	L	N	I	L	G	C	C	Q	G	R	N	W	D	P	A	Q	L	S	R	T	T	Q	75871
121	E	V	Q	E	F	Y	G	D	Y	I	A	V	N	P	H	L	F	S	L	N	I	L	G	C	C	Q	G	R	N	W	D	P	A	Q	L	S	R	T	T	Q	GI 1703494
161	G	L	T	A	L	L	S	L	K	K	C	P	M	I	R	Y	Q	L	S	S	E	A	A	K	R	L	A	E	C	V	K	Q	V	I	T	K	E	Y	E	75871	
161	G	L	T	A	L	L	S	L	K	K	C	P	M	I	R	Y	Q	L	S	S	E	A	A	K	R	L	G	E	C	V	K	Q	V	I	S	K	E	Y	E	GI 1703494	
201	L	F	E	F	R	R	T	E	V	P	P	L	L	I	L	D	R	C	D	D	A	I	T	P	L	L	N	Q	W	T	Y	Q	A	M	V	H	E	L	L	75871	
201	L	F	E	F	R	R	T	E	V	P	P	L	L	I	L	D	R	C	D	D	A	I	T	P	L	L	N	Q	W	T	Y	Q	A	M	V	H	E	L	L	GI 1703494	
241	G	I	N	N	N	R	I	D	L	S	R	V	P	G	I	S	K	D	L	R	E	V	V	L	S	A	E	N	D	E	F	Y	A	N	N	M	Y	L	N	F	75871
241	G	I	N	N	N	R	I	D	L	S	R	V	P	G	I	S	K	D	L	R	E	V	V	L	S	A	E	N	D	E	F	Y	A	N	N	M	Y	L	N	F	GI 1703494

FIGURE 2A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

281 AEIGSNIKNLMEDFQKKPKPEQQKLESIAADMKAFFVENYPQ 75871
 281 AEIGSNIKNLMEDFQKKRPKEQQKLESIAADMKAFFVENYPQ GI 1703494

321 FKKMSGTVSKHVTVVVGELSRLVSEERNLLEVSEVEQEELACQ 75871
 321 FKKMSGTVSKHVTVVVGELSRLVSEERNLLEVSEVEQEELACQ GI 1703494

361 NDHSSALQNIKRLLQNPKVTEFDAARLVMLYALHYERHSS 75871
 361 NDHSSALQNVKRLQLQNPKEVTEFDAVRLVMLYALHYERHSS GI 1703494

401 NSLPGLMMDLRNLKGVSEK YRKLVS AVVEYGGKRVRGSDDLF 75871
 401 NSLPGLIVDLRSKGVAEK YRKLVS AVVEYGGKRVRGSDDLF GI 1703494

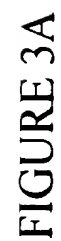
441 SPKDAVAITKQFLKGLKGVENVYTQHQPFLHETLDHLIKG 75871
 441 SPKDAVAITKQFLKGLKGVENVYTQHQPFLHETLDHLIKG GI 1703494

481 RLKENLYPYLGGPSTLRDRPQDIIIVFVIGGATYEEALTVYN 75871
 481 RLKENLYPYLGGPSTLRDRPQDIIIVFVIGGATYEEALTVYN GI 1703494

521 LNRRTTPGVRIVLGGTTVHN TKSFLEEVLASGLHSRSK E S S 75871
 521 LNRRTTPGVRIVLGGTTIHN TKSFLEEVLASGLHSRSR E S S GI 1703494

561 QVTSRSSASRR 75871
 561 QATSSANRR GI 1703494

FIGURE 2B

[illegible]

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
RAFTSMAN		

444616-23562

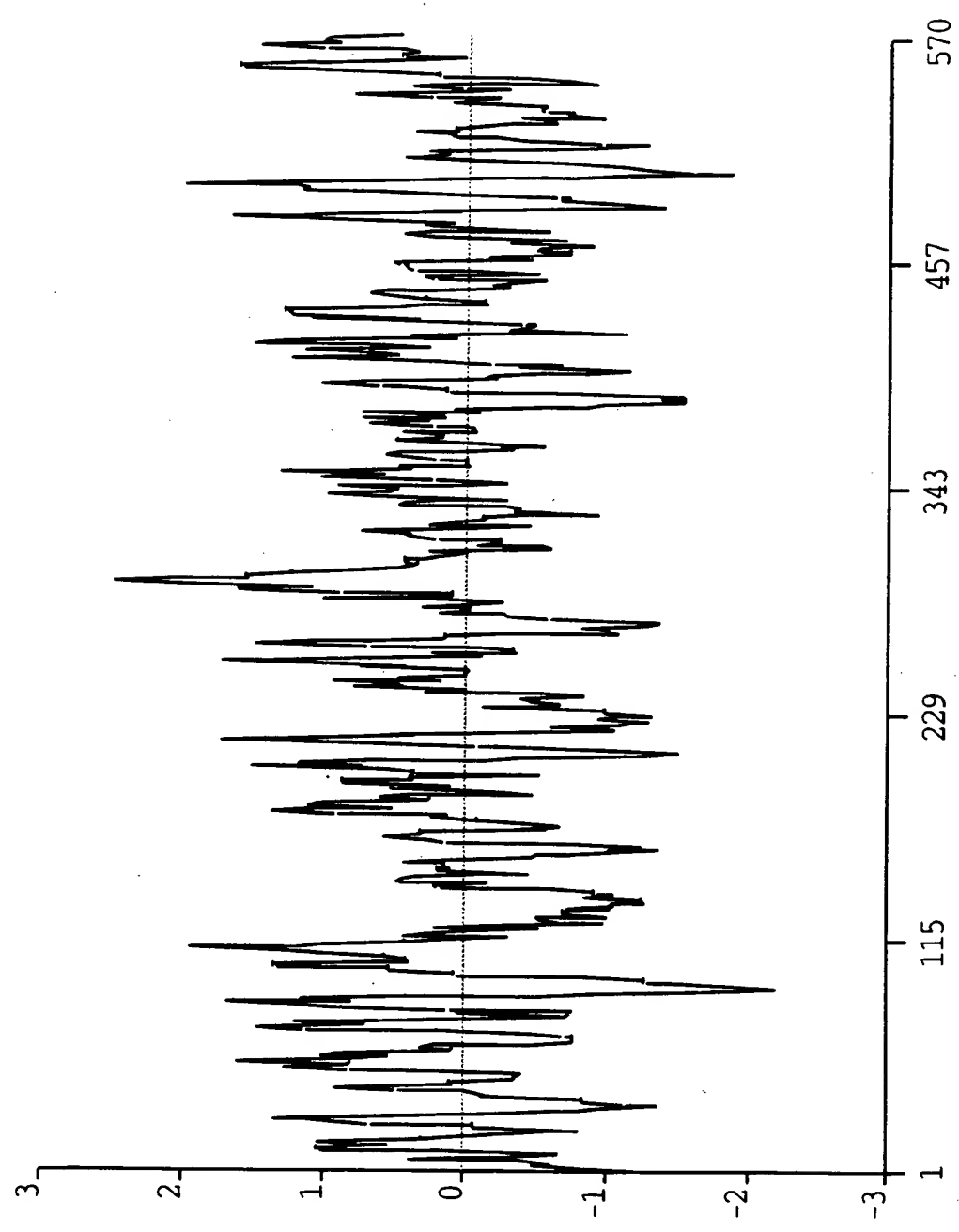


FIGURE 3B

5'-3' 3' 5'

9	18	27	36	45	54
5' NGA GCG GGG CAG GGG CAG GTG TAG CCT CTG TGC CTC GTT GTC CCC TGG CGC TAC					
63	72	81	90	99	108
CCG GAC ATC TCT CAG GGT GCC GGC ACC ATG AAG ATC TGG ACT TCG GAG CAC GTC					
			M K I W T S E H V		
117	126	135	144	153	162
TTT GAC CAC CCG TGG GAA ACT GTT ACA ACA GCT GCA ATG CAG AAA TAC CCA AAC					
F D H P W E T V T A A M Q K Y P N					
171	180	189	198	207	216
CCT ATG AAC CCA AGT GTG GTT GGA GTT GAT GTG TTG GAC AGA CAT ATA GAT CCC					
P M N P S V V G V D V L D R H I D P					
225	234	243	252	261	270
TCT GGA AAG TTG CAC AGC CAC AGA CTT CTC AGC ACA GAG TGG GGA CTG CCT TCC					
S G K L H S H R L L S T E W G L P S					
279	288	297	306	315	324
ATT GTG AAG TCT CTT ATT GGT GCA GCA AGA ACG AAA ACA TAT GTG CAA GAA CAT					
I V K S L I G A A R T K T Y V Q E H					
333	342	351	360	369	378
TCT GTA GTT GAT CCT GTA GAG AAA ACA ATG GAA CTT AAA TCT ACT AAT ATT TCA					
S V V D P V E K T M E L K S T N I S					

FIGURE 4A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

387	TTT ACA AAC ATG GTT TCA GTA GAT GAG AGA CTT ATA TAC AAA CCA CAT CCT CAG	414	423	432
	F T N M V S V D E R L I Y K P H P Q			
396		405		
441	GAT CCA GAA AAA ACT GTT TTG ACA CAA GAA GCC ATA ATT ACC GTG AAA GGA GTT	459	468	486
	D P E K T V L T Q E A I I T V K G V			
450		495	504	513
495	AGC CTC AGC AGT TAC CTT GAA GGA CTG ATG GCA AGT ACG ATA TCC TCA AAT GCT	513	522	531
	S L S S Y L E G L M A S T I S S N A			
504		549	558	567
549	AGT AAA GGC CGA GAA GCA ATG GAA TGG GTA ATA CAT AAA TTA AAT GCT GAG ATT	558	576	585
	S K G R E A M E W V I H K L N A E I			
558		603	612	621
603	GAA GAA CTG ACA GCC TCA GCA AGA ACC ATA AGG ACT CCA ATG GCA GCA GCA	612	630	639
	E L T A S A R G T I R T P M A A A			
612		657	666	675
657	GCG TTT GCA GAG AAG TGA TCG TGA CAG TTG GTA GAC AAC ATC GGG TAC TCC AGG	666	684	693
	A F A E K			
666		711	720	729
711	TCT CTC CAA ACT GAC TAT ATA TTT ATT TGT TAT TTT AAA AAT ACA ACT ATA TTT	720	738	747
				756

FIGURE 4B

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

[illegible]

1	M K I W T S E H V F D H P W E T V T A A M Q K Y P N P M N P S V V G V D V L D	2056691
1	M G K Y C A S L G V L K G P W D Q V F A A F W Q R Y P N P Y S K H V L T E D I V	GI 969170
41	R H I D P S G K L H S H R L L S T E W G L P S I V K S L I G A A R T K T Y V Q E	2056691
41	H R E V T A D H K L L S R R L L T K T N R M P R W A E R F F P A N V A H N V Y I	GI 969170
81	H S V V D P V E K T M E L K S T N I S F T N M V S V D E R L I Y K P H P Q D P E	2056691
81	V E D S I V D P K N R T M T T F T W N I N H A R L M A V E E R C V Y R V N P E N	GI 969170
121	K T V L T Q E A I I T V K G V S L S S Y L E G L M A S T I S S N A S K G R E A M	2056691
121	S S W T E V K R E A W V S S S L F G V S R A V Q E F F G L A R F K S N V T K S T K	GI 969170
161	E W V I H K K L N A E I E E L T A S A R G T I R T P M A A A A F A E K	2056691
161	G F E Y V L A R M Q G E A P S K T L V E T A K E A T E K A K E T A L A A T E K A	GI 969170
194		2056691
201	K D L A S K A A T K K K Q F V	GI 969170

FIGURE 5

APPROVED	D.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

5'-3' 3' 5'

9	18	27	36	45	54
5' NGG CCA ATC AGC GGC GGC GTT TCT TTT GCG GCT CCA CGT CGG CAC CAG CTG CGG					
63	72	81	90	99	108
GGC AAG ATG GAG GCG CTG ATT TTG GAA CCT TCC CTG TAT ACT GTC AAA GCC ATC					
M E A L I L E P S L Y T V K A I					
117	126	135	144	153	162
CTG ATT CTG GAC AAT GAT GGA GAT CGA CTT TTT GCC AAG TAC TAT GAC GAC ACC					
L I L D N D G D R L F A K Y Y D D T					
171	180	189	198	207	216
TAC CCC AGT GTC AAG GAG CAA AAG GCC TTT GAG AAG AAC ATT TTC AAC AAG ACC					
Y P S V K E Q K A F E K N I F N K T					
225	234	243	252	261	270
CAT CGG ACT GAC AGT GAA ATT GCC CTC TTG GAA GGC CTG ACA GTG GTA TAC AAA					
H R T D S E I A L L E G L T V V Y K					
279	288	297	306	315	324
AGC AGT ATA GAT CTC TAT TTC TAT GTG ATT GGC AGC TCC TAT GAA AAT GAG CTG					
S S I D L Y F Y V I G S S Y E N E L					
333	342	351	360	369	378
ATG CTT ATG GCT GTT CTG AAC TGT CTC TTC GAC TCA TTG AGC CAG ATG CTG AGG					
M L M A V L N C L F D S L S Q M L R					

FIGURE 7A

FIGURE 7B

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

1143 1152 1161 1170 1179 1188
 TGT CCT CTG CCT TGG AAG AGG CTT TGG GAA TAG TTC ATA GGG AAG GGA CAA CAT

1197 1206 1215 1224 1233 1242
 GGA AGA AAC AGC GAT TTA AAT TGT ATT GAA CAG GGC ATA TAA AAT GCA TTC TGT

1251 1260 1269 1278 1287 1296
 ACC CTG ATC TGG CAT ATA GCT TCA AAA CTG CAG TGG CGA GTG TCC ATC TCT TAG

1305 1314 1323 1332 1341 1350
 TTA GCT ACC TTA ACT GTC CAC CCT TAC TAC CTG TGG GAT CGT TGC CTG GTT TGT

1359 1368 1377 1386 1395 1404
 CTT CTC TGT GTC CTG GAG CAA AGC CAG TTC CTA AAA CTA AAA CTC CAT TCT AGT
 L L C V L E Q S Q F L K L K L H S S

1413 1422 1431 1440 1449 1458
 CTT GGG AAG AAA AGT TTC TAC TCA GAA CTG GGG AAG GAG TGG AAC TTA TGA CTT

1467 1476 1485 1494 1503 1512
 GGG CCT CTA GGC TGT CTC TGT CCC CTC AGC TCC CCG ACA TGC ATT TAC TCT CTG

FIGURE 7D

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

1521 1530 1539 1548 1557 1566
 CCG TGG GTC TGC AGT CGC TGC AAC CTA CCC TCT CTC TGC CTC AGC CTT ACA CCC

1575 1584 1593 1602 1611 1620
 AAG CAG TAG GTC TGT GCT CTC CCT GTC TCT AGG TCG CTG AGA GAG GTG CTT TTC

1629 1638 1647 1656 1665 1674
 TTC ATA AAA CCT TTG GGG TTT GGA TTT CCC CAG GAA GAT GGA GAA TGG AAT ACT

1683 1692 1701 1710 1719 1728
 CAC TCT TGG GTC TAA TCT TTC CCC TTG ACC CAG AAC TTC CTC CCC ACA AAA ATG

1737 1746 1755 1764 1773 1782
 CCT TTA AAA ACC TTC CTG AGA CTT AAG CAT TCT GCC CCA CTT ACT AAC TGC CAG

1791 1800 1809 1818 1827 1836
 TTC TCC AGC ACT GAG GTG GGG CAG ATA ACT GGG CAT ATT TAA GGG GGC ATC TTT

1845 1854 1863 1872 1881 1890
 GTG TAA AAG ATG CAT GGA GTC AGG AGA AAA CCA CCT TCA TAA ACT GCT CTG TGC

FIGURE 7E

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

1899 1908 1917 1926

AAA GAG GAA TAA AAC ATT TTT TCC AAA AAA AAA AAA AAA AAA A 3'

FIGURE 7F

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

1	MEALILEPSLYTVKAILLILDNDDGDRLLFAKYYDDDTYPSVKE	3086794
1	MEALILQPSLYTVKAILLILDNDDGDRLLFAKYYDDDTYPSVKE	GI 441486
41	QKAFENKIFNKTHRTDSEIALLLEGLTVVYKSSIDLYFYVI	3086794
41	QKAFENKIFNKTHRTDSEIALLLEGLTVVYKSSIDLYFYVI	GI 441486
81	GSSYENELMLMAVLNCLFDSLSQMLRKNVEKRALLENMEG	3086794
81	GSSYENELMLMTVLNCLFDSLSQMLRKNVEKRALLENMEG	GI 441486
121	LFLAVDEIVDGGVILESDPQQVVHRVALRGEDVPLTEQTV	3086794
121	LFLAVDEIVDGGVILESDPQQVVHRVALRGEDVPLTEQTV	GI 441486
161	SQVLQSAKEQIKWSLLR	3086794
161	SQVLQSAKEQIKWSLLR	GI 441486

FIGURE 8

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

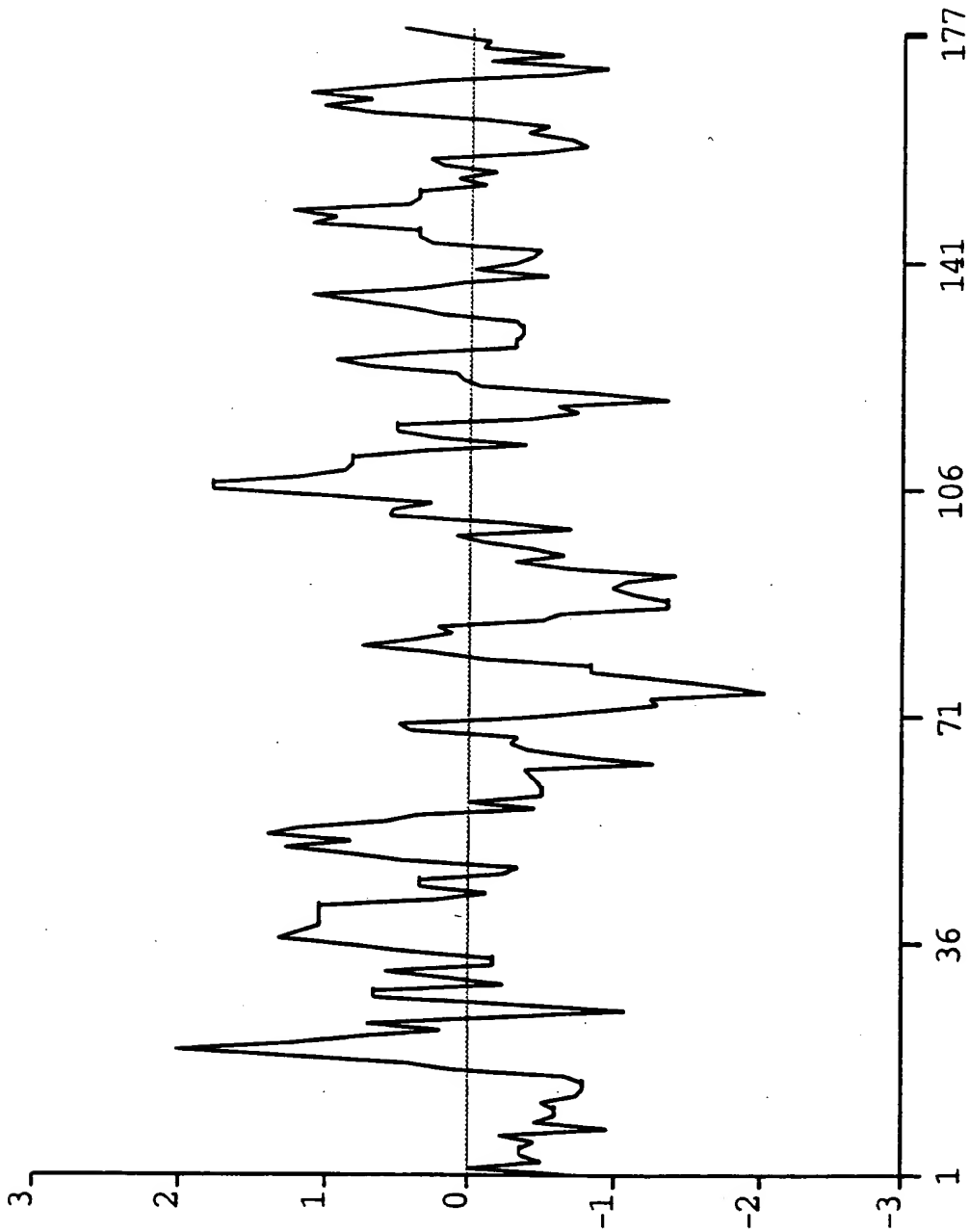


FIGURE 9A

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

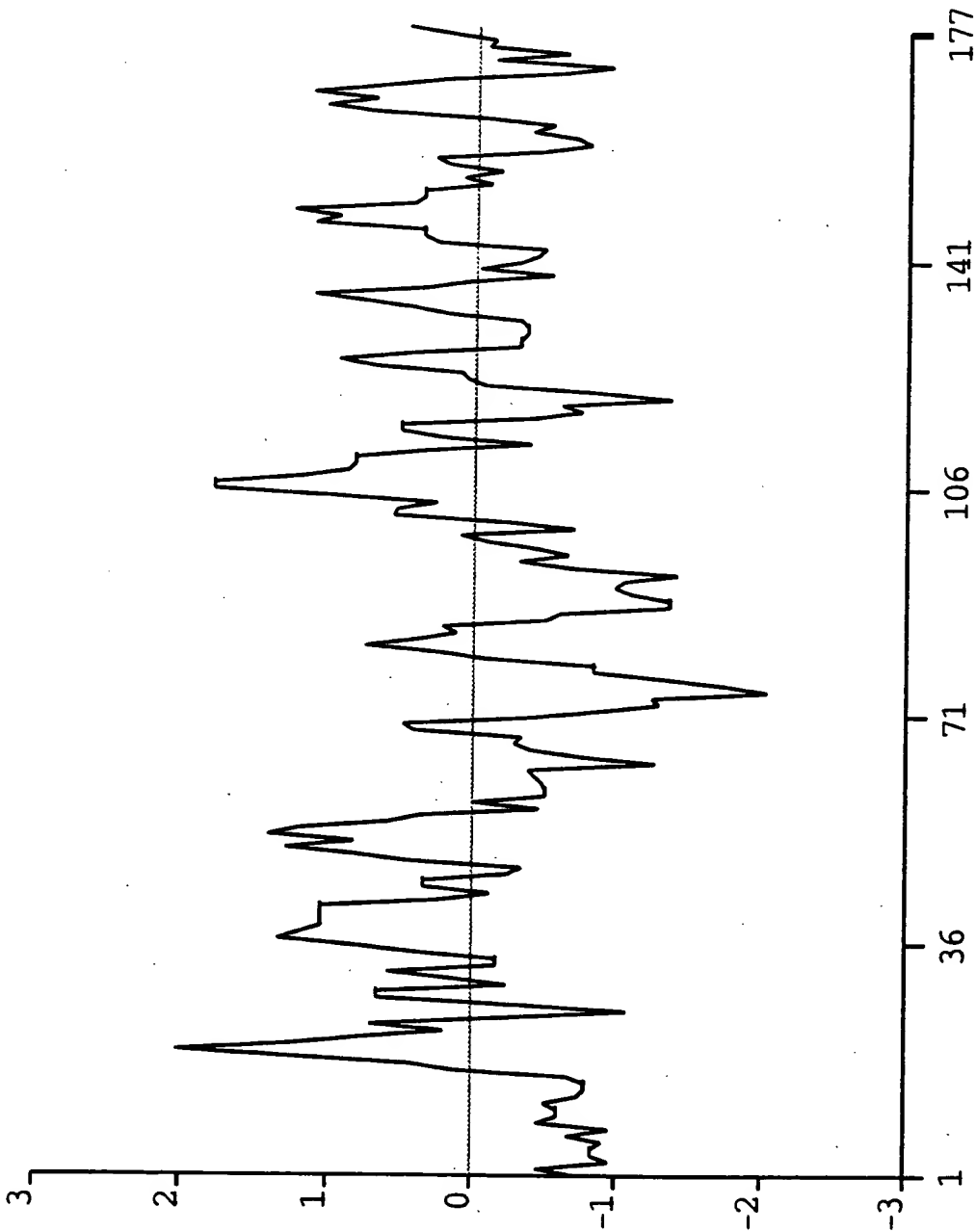


FIGURE 9B